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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,451	03/25/2004	D'Miles Salmon	ZEPH-00201	1772
28960	7590	11/15/2006	EXAMINER	
HAVERSTOCK & OWENS LLP			STOCK JR, GORDON J	
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SUNNYVALE, CA 94086			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/811,451	SALMON, D'MILES
	Examiner	Art Unit
	Gordon J. Stock	2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 September 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9,20,24 and 25 is/are rejected.
- 7) Claim(s) 10-19,22 and 23 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 August 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

1. The Amendment received on August 25, 2006 has been entered into the record.

### *Drawings*

2. The Drawings received on August 25, 2006 are accepted by the Examiner.

### *Claim Objections*

3. **Claims 1-25** are objected to for the following: as for **claim 1**, ‘a., b., c.’ should read -a), b), c)- in order to have a single period at the end of the claim. **Claims 2-9** are objected to for depending on an objected base claim. As for **claim 10**, ‘the target’ of line 3 and ‘the alignment signals’ of 10 lacks antecedent basis. In addition, ‘a., b., c., d.’ should read -a), b), c), and d) in order to have a single period at the end of the claim. **Claims 11-19** are objected to for depending on an objected base claim. As for **claim 20**, ‘a., b.’ should read -a), b)- in order to have a single period at the end of the claim. **Claims 21-24** are objected to for depending on an objected base claim. As for **claim 25**, ‘first receive’ of line 8 should read –first receiver--. Corrections required.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1, 2, 5, 6, 8, 9, 20, 24, and 25** are rejected under 35 U.S.C. 102(a) as being anticipated by **Hart (6,375,579)**—previously cited.

As for **claim 1**, Hart discloses a golf swing analysis system that is a positioning and alignment device (col. 4, lines 60-65) comprising: a first transmitter and a first receiver (Fig. 2: 16 and 34); a second transmitter and a second receiver (Fig. 2: 20, 32); an indicator, display unit (Fig. 2: 46). As for the recitations, “for transmitting positioning signals to a target object... in a communication path between the positioning object and the target object” and ‘for transmitting the alignment signals from the target object and for receiving ... in the communication path between the positioning object and the target object’ and ‘for indicating when the positioning object ... and for monitoring the trajectory...towards the target object’ it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

As for **claim 2**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the first transmitter is a laser (Fig. 2: 16) and the second receiver is a photosensor for detecting the laser light (Fig. 2: 20). As for the recitations ‘for generating laser light positioning signals’ and ‘for detecting the laser light positioning signals’ it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

As for **claim 5**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the second transmitter is a radio frequency generator (Fig. 2: 32) and the first receiver is a radio frequency receiver (Fig. 2: 34). As for the recitations ‘for generating radio alignment signals’ and ‘for detecting the radio frequency alignment signals’ it has been held that a

recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987).

As for **claim 6**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the indicator is a display element (Fig. 2: 46).

As for **claim 8**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the first transmitter and the first receiver are configured to detachably couple to the positioning object (col. 8, lines 45-46) when the first transmitter and first receiver are considered the sensor and rf transmitter of the sensor module (Fig. 1: 44 and Fig. 2: 20 and 32).

As for **claim 9**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the second transmitter and the second receiver are configured to be removably positioned near the target object, the golf ball (col. 8, lines 48-50) when the second transmitter and second receiver are considered the laser and rf transmitter of the base unit (Fig. 1: 42 and Fig. 2: 16 and 34).

As for **claim 20**, Hart discloses the following in a positioning and alignment system (col. 4, lines 60-65): a target unit for positioning near a target (Fig. 1: 42); a positioning unit for coupling to an object (Fig. 1: 44), wherein the positioning unit communicates a positioning signal to the target unit and the target unit communicates an alignment signal to the positioning unit when the positioning unit and the target unit are in alignment (col. 2, lines 5-8; Fig. 2: 18 and 33); wherein, the positioning signals are communicated via RF to the target unit (col. 4, lines 44-65; Fig. 2: 33); wherein, the alignment signal is an optical signal denoting the alignment of the target unit with the positioning unit with the sensors coming into alignment with the target

unit's optical signal, plane shaped laser beam (col. 4, lines 48-55); wherein, the system monitors the trajectory of the object as the object moves along the path towards the target (col. 4, lines 15-20). As for the recitations 'for positioning near the target' and 'for coupling to the object' it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987).

As for **claim 24**, Hart discloses everything as above (see **claim 20**). In addition, he suggests the positioning unit is configured to couple to a golfing putter (Fig. 1: 44; col. 8, lines 45-46) for the sensor may be attached to any golf club (col. 9, line 8) and the target unit is configured to be positioned near a golf ball target (Fig. 1: 42; col. 8, lines 48-50); wherein the positioning and alignment system monitors positioning and alignment of a golfer's putting trajectory (col. 5, lines 18-20).

As for **claim 25**, Hart discloses a system for positioning and alignment (col. 4, lines 60-65); comprising means for providing two way communication path between the object and target (Fig. 1: target comprising 38 and 18 with two communication: Fig. 2: 18 and 33); a positioning unit comprising a first transmitter, first receiver, and an indicator, a counter that indicates the sensors passing into laser field (Fig. 2: 10, 20, 32, 26); a target unit comprising a second transmitter and second receiver (Fig. 2: 42, 16, 34); wherein, the first and second receiver with first and second transmitter provide two-way communication (Fig. 2: 18 and 33); wherein the indicator provides an indication when the object is moved in or out of the two-way communication path (col. 4, lines 50-54). As for the recitations 'for monitoring the alignment of an object with a target,' 'for detachably coupling to the object,' 'for positioning near or at the

target' and 'for monitoring the alignment of object' it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hart (6,375,579)-previously cited.**

As for **claim 3**, Hart discloses everything as above (see **claim 2**). In addition, he mentions an optical configuration (Fig. 6). He does not explicitly mention an optical configuration that projects the laser light into an elongated laser beam. However, he states that the laser source provides a plane shaped laser beam (col. 4, lines 5-6). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made that Hart's system had an optical configuration in order to project the laser beam into an expanded plane shape.

Though the Examiner treated the recitation 'for projecting the laser light into an elongated laser beam' positively, this recitation is an intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

8. **Claims 4 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hart** (6,375,579)-previously cited in view of **Goszyk** (6,095,928)-previously cited.

As for **claim 4**, Hart discloses everything as above (see **claim 3**). And he mentions a second optical configuration (Fig. 3). However, he is silent concerning a second optical configuration that filters background light from the second receiver. However, Goszyk in a three-dimensional object path tracking system teaches a high-pass filter for selectively detecting the light of the system rather than ambient light and a spatial filter (col. 6, lines 1-15; col. 10, lines 40-45). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have a second optical configuration such as a spatial filter and a high pass filter in order to have the sensor only detect light from the laser in the base unit without ambient light from the background to increase the signal to noise ratio.

Though the Examiner treated the recitation ‘for filtering background light from the second receiver’ positively, this recitation is an intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

As for **claim 7**, Hart discloses everything as above (see **claim 6**). He does not state that the display element generates light. However, Goszyk in a three-dimensional object path tracking system teaches having a display element generating light (col. 4, lines 18-20). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the display element generate light in order to make the data accumulated visible to a viewer.

*Allowable Subject Matter*

9. **Claims 10-19** would be allowable if rewritten to overcome the objections stated above.

**Claims 21-23** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to **claim 10**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a system for tracking a trajectory of an object relative to a target area means for generating alignment signals and means for detecting the alignment signals at the object, in combination with the rest of the limitations of **claims 10-19**.

As to **claim 21**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a positioning and alignment system ‘the positioning unit is configured to illuminate light when the target unit communicates the alignment signal to the positioning unit,’ in combination with the rest of the limitations of **claim 21**.

As to **claim 22**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a positioning and alignment system ‘the positioning unit comprises an optical transmitter’ in combination with the rest of the limitations of **claim 22**.

As to **claim 23**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a positioning and alignment system ‘the target unit comprises a radio transmitter’ in combination with the rest of the limitations of **claim 23**.

*Response to Arguments*

10. Applicant's arguments with respect to **claims 1-9, 20, 24, 25** have been considered but are moot in view of the new ground(s) of rejection. However, Examiner will address the arguments

received on August 25, 2006. In regards to claim 1 on page 7 that Hart has no ability to monitor alignment of the golf's club with a real target or monitor a trajectory of an object from a target position as and the object moves towards the object along a path, Examiner disagrees (see Hart: col. 4, lines 60-65 and col. 4, lines 15-20; in addition, a path is demonstrated Fig. 1: 40 with real target: 38). In addition, in **claim 1**: the monitoring is recited as an intended use. See rejection of claim 1 above. As for the arguments concerning **claim 1** on page 8 lines 10-25, Examiner disagrees, for all recitations are intended uses. See rejection of **claim 1** above. Again, Hart does teach positioning and alignment device that monitors the alignment of an object with a target in a path between the object and the target (see Hart: col. 4, lines 60-65 and col. 4, lines 15-20; in addition, a path is demonstrated Fig. 1: 40 with real target: 38). As for the arguments concerning claims 10-19, the Examiner has found the arguments persuasive (see Remarks page 8: lines 30-35 and page 9 lines 1-9). Subsequently, the previous rejection of **claims 10-19** has been withdrawn. In regards to **claim 20** and Hart on page 9 of Remarks lines 10-22 that Hart fails to teach positioning and alignment device for monitoring the alignment of an object with a target in a path between the object and the target, Examiner disagrees. See Hart: col. 4, lines 60-65 and col. 4, lines 15-20; in addition, a path is demonstrated Fig. 1: 40 with real target: 38. In regards to the Remarks on pages 9-10 with **claims 20-24** and Kobayashi the Examiner finds the arguments persuasive. Subsequently, the previous rejection of **claims 20-22** under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) with Kobayashi have been withdrawn.

In regards to the arguments on page 10 lines 20-25 to **claims 3, 4, and 25**, Examiner disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., for indicating

when the positioning object and the target object are aligned within a communication pathway) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In addition, ‘for indicating ... communication pathway’ is an intended use recitation. . It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987). As for not teaching a positioning unit including an indicator, Examiner disagrees. See Hart : col. 4, lines 50-54 and Fig. 2: 10 and 26. In regards to the arguments on page 10 lines 23-25 that the prior art does not teach the distinguishing features or in combination with other features the limitations of claims 3 and 4 due to claims 3-4 depending from claim 1 (in view of the applicant’s previous arguments concerning claim 1) and actually not teaching either optical configurations please refer to the rejection of **claims 1, 3 and 4** above and the discussion of the **claim 1** arguments above.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent 5,324,039 to Reimers et al.

U.S. Patent 5,692,966 to Wash

U.S. Patent 6,402,634 to Lee et al.

U.S. Patent 6,821,211 to Otten et al.

U.S. Patent 6,923,728 to Lin

***Fax/Telephone Numbers***

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

- 1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and
- 2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

*Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (571) 273-8300*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (571) 272-2431.

The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached at 571-272-2800 ext 77.

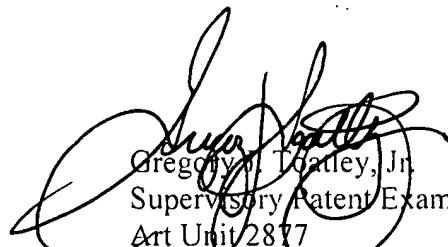
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November 9, 2006

  
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Supervisory Patent Examiner  
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